Ms. Marlene H. Dortch Secretary Office of the Secretary Federal Communications Commission 445 12th Street, S.W. Room TW-A325 Washington DC 20554

Re: Ex Parte Presentation

In the Matter of IP-Enabled Services, WC Docket No. 04-36

Dear Ms. Dortch:

This is to inform you that Robert M. Wienski, VP of VeriSign Communications' Next Generation Services, Anthony M. Rutkowski, VP of Regulatory Affairs, and Brian Cute, Director of Government Relations of VeriSign Inc, met on 30 June 2004 with Jeremy Miller, Assistant Division Chief of the Competition Division, Marcus Maher, and Nazar Khodorovsky – all of the Wireline Competition Bureau. Russ Hanser of the WCB was also briefly present.

The purpose of this meeting was to provide clarifications concerning VeriSign's comments in the proceeding – particularly those dealing with the treatment of IP-enabled signalling and directory services. The attached slides formed the basis of dialogue, and convey the substance of what was discussed.

VeriSign is a globally recognized leader in providing an array of large-scale, ultra-high availability infrastructure support capabilities for traditional voice telecommunications, Internet, security, and financial transaction services to providers and consumers through its various divisions in the U.S. and worldwide. As part of these commercial infrastructure support services, it provides wireless, wireline, cable, and IP-enabled signalling and directory services, and participates in or leads several of the related technology, industry, and standards activities.

VeriSign looks forward to continued collaboration with the Commission in considering matters relating to the subject rulemaking proceeding and creating an appropriate IP-Enabled Services regulatory framework.

Pursuant to the Commission's rules, this *ex parte* letter together with the slides are being filed via the Commission's Electronic Comment Filing System for inclusion in the public record of the above-referenced proceeding.

Respectfully submitted,

/s/

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cc: Jeremy Miller Marcus Maher Russ Hanser

IP-enabled Services, Docket 04-36
FCC ExParte Briefing
Washington DC
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IP-enabled Signalling and Directory Services: framework and treatment

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VeriSign, Inc

Summary

- Signalling and Directory Services constitute a "backplane" infrastructure necessary for all networks and services to operate
 - + Not part of any "layer," but cut across all layers
 - + Constitute network elements
- Have been part of telecom, Internet, and other communications networks since their inception
- + Often ignored because they are bundled into services offered to the public
- + Entwined with almost every regulatory consideration and requirement
- + Substantial bodies of law pertain to Signalling and Directory Services
 - + Computer III
 - + Communications Act of 1996
 - + Ongoing proceedings
 - + International arrangements
- + IP-enabled services proceeding must necessarily grapple with a framework and requirements for *IP-enabled Signalling and Directory Services*
 - + Considerations
 - + Possible attributes



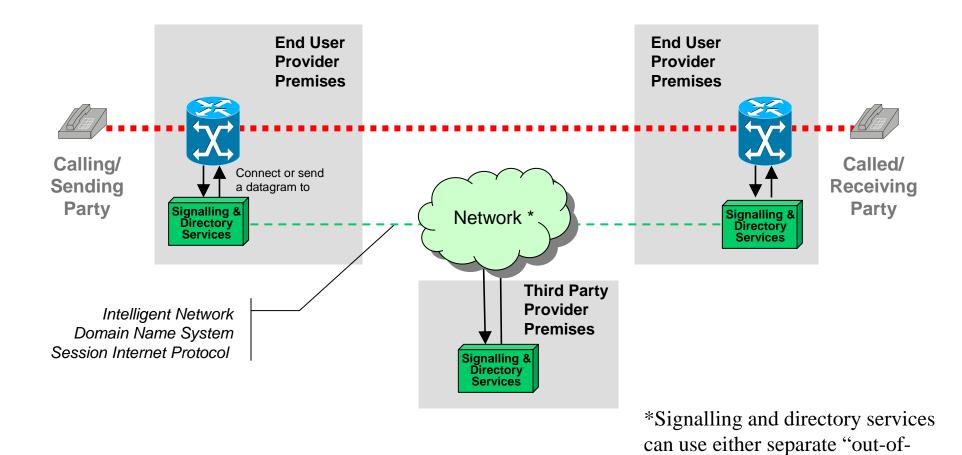
Signalling and Directory Services: what do they do

+ Provide

- Authoritative information (Global Title Translation / Name Resolution)
 about routing a PSTN call or Internet datagram or multimedia application
 to the right network end point
 - Telephone number +1 703-948-4305 can be reached using
 - LRN, destination point code, NXX/NXX-X,
 - IP address xxx.xxx.xxx.xxx or URI xxx@xxx.xxx
 - + URI <u>www.fcc.gov</u> can be reached at 192.104.54.3
 - + SIP address xxx@xxx.xxxx can be resolved at xxx.xxx.xxx.xxx
- 2. Authenticated basic information about the customer associated with any public network identifier (telephone numbers, Internet addresses, etc)
 - Telephone number +1 703-948-4305 is associated with: person, organization, address, contact information
 - + IP address or domain is associated with: person, organization, address, contact information, disability information, GETS flag



Signalling and Directory Services: Telecom, Internet, NGN are similar





band" transport networks, or integrated "in-band" networks

Signalling and Directory Services: why important

- + Necessary for communication networks and applications to operate
- Interfaces and attributes determine the openness of networks and competition
- Entwined with numerous public policy objectives
 - + public safety (E911) needs
 - + disability assistance (IP Relay Service)
 - + law enforcement support
 - competition (Computer III/number portability/1996 Act requirements, LNP)
 - + fraud prevention
 - + restoration after failures
 - + call prioritization during emergencies
 - + privacy and data protection
 - + consumer protection against unwanted intrusions



Signalling and Directory Services: history

- + Have been a fundamental part of communication networks and regulation since 1850
 - + Very first international agreements dealt with standards and regulation of digital signalling and directory services
- Existing PSTN Intelligent Network out-of-band signalling conceived in 1955 (Irwin Dorros)
 - Paved the way for development of SS7 Intelligent Network Services by AT&T and Bellcore in early 1980s
 - + Array of industry and public interest considerations led to Computer III proceeding in mid-80s
 - + Open Network Architecture requirements have been core to signalling and directory services regulatory mandates for past 20 years
- + Existing PSTN directory services became part of Commission proceedings beginning in the mid-80s often entwined with signalling services, e.g., CPNI availability
- Existing Internet signalling conceived to replicate PSTN Intelligent Network capabilities
 - + Earliest Internet services provided limited signalling and directory capabilities (port 42 Host Name, port 43 Whols)
 - + A growing array of more flexible and generic signalling and directory capabilities emerged therough the 1980s (port 53 DNS, port 63 Whols++, port 82 Hosts2 NameServer...)
 - + Emergence of PSTN interworking and VoIP capabilities in the 1990s led to additional requirements and standards domestically and internationally (port 53 DNS-ENUM, port 5060,5061 SIP, ...)



Signalling and Directory Services: law and regulation

- + Computer III
- + Telephone Number Portability
- + Communications Act of 1996
- + CALEA
- + CANSPAM
- + Americans with Disabilities Act



IP-enabled Signalling and Directory Services: what are they

- Address resolution services
 - + Resolution of public telephone numbers (DNS-ENUM)
 - + For VoIP
 - + For other services
 - + Resolution of SIP addresses
 - + For VoIP
 - + For other services
 - + Resolution of IP addresses
- + Session Internet Protocol implementations
- + PSTN-Internet gateway services
- IRIS (EREG, AREG, DREG) directories for basic subscriber and provider information
- Authentication requirements



IP-enabled Signalling and Directory Services: global treatment

- Other nations
 - + Canada
 - + Germany
 - + Australia
- + International organizations
 - + European Commission
 - + APEC Tel
 - + CITEL
 - + International Telecommunication Union
 - + Council of Europe (Cybercrime Convention)



IP-enabled Signalling and Directory Services: 04-36 framework

- + Treatment as a distinct, critical class of services
- + Span existing PSTN and public VoIP environment, among others
- + Non-discriminatory treatment in the IP-enabled regulatory framework
 - + public safety (E911) needs
 - + disability assistance
 - + law enforcement support
 - + competition (Computer III/number portability/1996 Act requirements, LNP)
 - + fraud prevention
 - + restoration after failures
 - call prioritization during emergencies
 - privacy and data protection
 - + consumer protection against unwanted intrusions
- Flexible, "light" regulatory approaches needed
- + No private services or network regulation



Importance of IP-Enabled Directory Services – 911, etc

